

**Remarks:**

Claims 1–21 and 27 were previously pending with claims 1, 7, and 12, being independent. Claims 1, 4, 7, 10, 12, 15, 17, and 19 are currently amended. Therefore claims 1–21 and 27 are currently pending with claims 1, 7, and 12 being independent.

In the Decision by the Board of Patent Appeals and Interferences dated June 13, 2007 (the “Decision”), the Board rejected claims 1–22 and 27 under 35 U.S.C. § 103(a) as being obvious over articles authored by Baum and Dix, as well as U.S. Patent No. 6,065,000 issued to Jensen.

Regarding the Decision, Applicants traverse finding of fact number 3, which states “Control chart analysis is an analysis displayed in tabular or graphical form (Specification 7:24–25).” (Decision, page 6). The portion of the specification cited by the Board reads: “After performing date gap analysis, the control chart analysis is performed and the results thereof displayed in tabular or graphical form.” This sentence merely recites a possible sequence of events performed by the computer program or method disclosed in the specification, stating that the results of date gap and control chart analyses may be displayed in “tabular or graphical form.” This sentence clearly does not define control chart analysis at all, but rather lists one possible way the results of such an analysis may be displayed or presented.

Control chart analysis is described in the specification at page 10, lines 22–24, which read: “control chart analysis . . . involves performing various general and application-specific statistical algorithms and operations on the data.” The specification goes on to say that control charts (in contrast to control chart analysis) “may include plotted averages, plotted ranges, X-bar, and other statistically meaningful graphs.” (Page 10, lines 24–26, emphasis added). Nowhere does the specification reduce the meaning of control chart or control chart analysis to “an analysis displayed in tabular or graphical form” as asserted in the Decision.

Applicants also traverse finding of fact number 5, which states that “Jensen shows several examples of analyses displayed in tabular or graphical form, *which are*

*therefore control charts.*" (Decision, page 6). As explained above, if results of an analysis are displayed in tabular or graphical form, it does not necessarily follow that the analysis is a control chart analysis or the displayed results are a control chart.

Turning now to the rejection of claim 1 under 35 U.S.C. § 103(a), Applicants have amended claim 1 to recite "wherein the date gap analysis includes determining an elapsed time between each of three or more consecutive events and an average elapsed time, and wherein the output includes a chart illustrating a *value for each elapsed time according to a sequence in which the consecutive events occurred* and a value for the average elapsed time" (emphasis added). Support for the new language of claim 4 is found in the specification at page 10, lines 27–30, page 11, line 29 through page 12, line 27, and Fig. 4, among other places. None of the prior art references cited by Board teaches or suggests each limitation of claim 1.

Baum discloses a "unique approach to modeling labor resources" and "emphasizes proper techniques for modeling equipment breakdowns and scheduled maintenance." (Baum, 448). Baum discloses modeling equipment breakdowns by collecting data from various machines and performing a statistical analysis on the data. (*Id.*, 452). In contrast to the invention of claim 1, however, Baum does not disclose the use of any statistical analysis that preserves a sequence of events. The histogram illustrated in figure 6 (page 452), for example, plots "Machine Uptime" against the "Number of Occurrences," which does not preserve or illustrate values for elapsed times between consecutive events "according to a sequence in which the consecutive events occurred." Furthermore, the Kolmogorov-Smirnov (K-S) test disclosed in Baum "measures the greatest difference  $D_n$  between the distribution function and the data points in the sample" and is therefore unrelated to illustrating values for elapsed times between consecutive events "according to a sequence in which the consecutive events occurred" as recited in claim 1.

Dix and Jensen also fail to teach or suggest "wherein the date gap analysis includes determining an elapsed time between each of three or more consecutive events

and an average elapsed time, and wherein the output includes a chart illustrating a value for each elapsed time according to a sequence in which the consecutive events occurred and a value for the average elapsed time," as recited in claim 1.

Regarding the rejection of claim 4, claim 4 depends from claim 1 and has been amended to recite

the chart including a graph with a first graph axis and a second graph axis, wherein each of the three or more consecutive events is represented by a point on the graph, the points being approximately equally spaced along the first graph axis in the order the consecutive events occurred and placed along the second graph axis such that the position of each point along the second graph axis represents an elapsed time between the event corresponding to the point and the event corresponding to an immediately preceding point, wherein at least one consecutive pair of the points is connected by a graph line.

Support for the new language of claim 4 is found in the specification at page 10, lines 27–30, page 11, line 29 through page 12, line 27, and Fig. 4, among other places. Thus, claim 4 now recites various details of the chart set forth in claim and not previously recited in any of the claims. As explained above, the references cited by the Board fail to teach or suggest the chart as set forth in claim 1, much less the details recited in claim 4.

Claims 7, 12, and 15 have been amended to recite elements similar to those of claim 1, and claims 10, 15, and 19 have been amended to recite elements similar to those of claim 4. The remaining claims depend, either directly, or indirectly, from claim 1, 4, 7, 10, 12, 15, 17, or 19.

For at least the reasons set forth above, applicant respectfully submits that claims 1–21 and 27 are now in allowable condition and requests a Notice of Allowance. In the event of further questions, the Examiner is urged to call the undersigned.

Any additional fee which is due in connection with this amendment should be applied against our Deposit Account No. 19-0522.

Respectfully submitted,  
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